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## NOTICE OF ALLOWANCE AND FEE(S) DUE

25944

P.O. BOX 19928

ALEXANDRIA, VA 22320

7590

01/13/2004

OLIFF & BERRIDGE, PLC

EXAMINER

CASTRO, ARNOLD

ART UNIT

PAPER NUMBER

3747

DATE MAILED: 01/13/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987 411	11/14/2001	Takashi Suzuki	110648	7031

TITLE OF INVENTION: CRANKING-CAUSED VIBRATION SUPPRESSING APPARATUS AND METHOD FOR INTERNAL COMBUSTION ENGINE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonnmyisional	NO	\$1330	\$300	\$1630	04/13/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current **SMALL ENTITY status:** 

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- □ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### **DVELB - REE(S) LISVASMILLYF**

d send this form, together with applicable fee(s), to:  $\overline{h1ai}$  Mail Stop ISSUE FEE

11/14/2001

FILING DATE

114,786/60

APPLICATION NO.

(Date)			
(Summy:C)			
(Depositor's nume)			
Certificate of Mailing or Transmission  I hereby centify that this Fee(s) Transmital is being deposited with the Unite States, fostal Service with authorist postage for first class mail in an envelop States, assult stop ISSUE FEB address above, or being faceimil transmitted to the USPTO, on the date indicated below.		8760	OLIFF & BI P.O. BOX 19 ALEXANDR
Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, mushave its own certificate of mailing or transmission.	01/13/2004	ONDENCE VDDE	<u>С</u> П <b>В</b> ИЕМТ СОВВЕЅРО
CATION FEE (if required). Blocks 1 through 4 should be completed where of maintenance fees will be mailed to the current correspondence address; and/or (b) indicating a separate "FEE ADDRESS" to	ld be used for transmitting the ISSUE FEE and PUBLY confere including the Patent, advance orders and motific, on a directed otherwise in Block I, by (a) specifying a new c	rected below o	INSTRUCTIONS: 1 appropriate. All furd indicated unless con maintenance fee noti
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Commiss <b>ioner for Patents</b> P.O. Box 1450 Alexandria, Virginia 22313-1450	E THE TO SEPARATE AND A SERVICE OF THE SERVICE OF T	ioi silia bila	c ombicie and s

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DATE DUE	TOTAL FEE(S) DUE	EORFICVATION REE	FEE	ISSUE	SMALL ENTITY	АРРЦИ, ТҮРЕ

Takashi Sovuki

EIRST NAMED !! TENTOR

TITLE OF INVENTION: CRANKING-CAUSED VIBRATION SUPPRESSING APPARATUS AND METHOD FOR INTERNAL COMBUSTION ENGINE

(B) KESIDEZGT SCLLX and STATE OR COUNTRY) (A) NAME OF ASSIGNEE PLEASE NOTE: Unless an assignce is identified below, no assignce data will appear to the patent is NOT a substitute to the USPTO or is being submitted under separate cover to the patent is NOT a substitute for filing an assignment has 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (First of type) U "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. mounting od Iliw

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Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to rescriptly may previously paid issue fee to the application identified above.

ct of 1995, no persons are required to respond the respondence.	Under the Paperwork Reduction A collection of information unless it dis
uired by 37 CFR 1.311. The information is required by 37 CFR 1.311. The information is required by 35 U.S. 122 and 37 CFR 1.14. This collection of the depth of the USPTO to proceed by 35 U.S. 122 and 37 CFR 1.14. This collection of the Chief Information under the confidence of time you require to complete this form the S. Department of Commerce, Alexandra, Mirginia 22313-1450.	obtain or retain a benefit by the put application. Confidentiality is govern cestimated to take 12 minutes to composite a population of the amoust on the amous pagestions for reducing this burden supplied in Transmitted in Diffice, U. Suterin and Irademark Office, U.
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OMB 06: 33 U.S. Patent and Trader TRANSMIT THIS FO - MITH FEE(S)

K Office; U.S. DEPARTMENT OF COMMERCE

1607

CONFIRMATION NO.

110648

ATTORNEY DOCKET NO.

PTOL-85 (Rev. 11/03) Approved for use through 04/30/2004.





## United States Patent and Trademark Office

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			DATE MAILED: 01/13/200	14

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or eiter May 29, 2000)

The Patent Term Adjustment to date is 210 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tresday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 210 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Question relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)					
	09/987,411	SUZUKI, TAKASHI					
Notice of Allowability	Examiner	Art Unit					
	Arnold Castro	3747					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  1. This communication is responsive to							
2.  The allowed claim(s) is/are <u>3-5,8,12-15,18 and 22</u> .							
a) ⊠ All b) ☐ Some* c) ☐ None of the:	, _ , _ , _						
1. \( \sum \) Certified copies of the priority documents have							
<ol> <li>Certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority do</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ol>			tion from the				
* Certified copies not received:  5. Acknowledgment is made of a claim for domestic priority uses (a) The translation of the foreign language provisional and acknowledgment is made of a claim for domestic priority uses.	application has been rece	ived.					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of	this application. THIS T	HREE-MONTH PERIOD IS NOT	EXTENDABLE.				
7. A SUBSTITUTE OATH OR DECLARATION must be subr INFORMAL PATENT APPLICATION (PTO-152) which gives reasonable to the subration of the subratio			IOTICE OF				
<ul> <li>8. CORRECTED DRAWINGS must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached</li> <li>1) hereto or 2) to Paper No</li> <li>(b) including changes required by the proposed drawing correction filed, which has been approved by the Examiner.</li> </ul>							
	(c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.						
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
Attachment(s)							
<ul> <li>1 ☐ Notice of References Cited (PTO-892)</li> <li>3 ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>5 ☐ Information Disclosure Statements (PTO-1449), Paper No. 6</li> <li>7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	4 <u> </u>	e of Informal Patent Application (I view Summary (PTO-413), Paper niner's Amendment/Comment niner's Statement of Reasons for v r	No				

Application/Control Number: 09/987,411

Art Unit: 3747

#### **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance:

All independent claims contain a limitation to suppressing the vibrations of an engine during cranking of the engine by a motor and estimating the fluctuation in resistance torques in accordance with the rotational phase of the crankshaft and the controller adjusting the rotational phase of the crankshaft occurring at the beginning of cranking as determined by estimation. The prior art did not disclose or suggest such an invention.

### Allowable Subject Matter

2. Claims 3-5, 8, 12-15, 18, and 22 are allowed.

#### Conclusion

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are starter motors that reduce engine vibrations during operation of internal combustion engine and are listed in attach PTO-892. Copies of U.S. Patents are not provided pursuant to MPEP 1302.12.
- 4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnold Castro whose telephone number is (703) 305-0039. The examiner can normally be reached on 7:30am-5:00pm.

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Art Unit: 3747

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yuen Henry can be reached on (703) 308-1946. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

MAHMOUD GIMIE
PRIMARY PATENT EXAMINER
ART UNIT 3747

Arnold Castro Examiner Art Unit 3747 Page 3

AC January 11, 2004